

PUBLIC HEALTH FACT SHEET

Meningococcal Disease

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What is meningococcal disease?

Meningococcal meningitis and meningococcemia are two kinds of meningococcal disease. Meningococcal meningitis is an infection of the tissue (called the “meninges”) that surrounds the brain and spinal cord. Meningococcemia is an infection of the blood and may also involve other parts of the body. Bacteria called *Neisseria meningitidis* cause both of these illnesses.

What is *Neisseria meningitidis*?

Neisseria meningitidis are bacteria that may be found in people’s throats and noses. About 5 to 15% of people carry these bacteria and do not get sick from them. These people are called “carriers.” Carriers only have bacteria for a short time. Usually, the bacteria go away and people may have increased resistance to infection in the future. In rare cases, the bacteria may get into the blood or the tissue surrounding the spine and brain and cause severe illness.

How are the bacteria spread?

The bacteria are spread from person-to-person through saliva (spit). You must be in close contact with an infected person’s saliva in order for the bacteria to spread. Close contact includes activities such as kissing, sneezing, coughing, sharing water bottles, sharing eating/drinking utensils, or sharing cigarettes with someone who is infected.

How is meningococcal disease diagnosed?

Persons showing signs and symptoms of illness are diagnosed by growing the bacteria from their spinal fluid (meningitis) or blood (meningococcemia) in the laboratory. It may take up to 72 hours to have test results. Sometimes an earlier diagnosis can be made by looking at a person’s spinal fluid under a microscope.

What are the signs and symptoms of illness?

Meningococcal meningitis:

Signs and symptoms of meningitis include sudden onset of a high fever, a stiff neck, headache, nausea, vomiting, and/or mental confusion. Changes in behavior such as confusion, sleepiness, and being hard to wake up are important symptoms of this illness. A rash may be present, often involving the hands and feet. In babies, the only signs of this illness may be acting more tired than usual, acting more irritable than usual, and eating less than usual. Babies with meningitis will usually have a fever, but this is not a reliable sign of illness. Anyone who has these symptoms should contact their health care provider right away.

Meningococcemia:

Signs and symptoms of meningococcemia include a sudden onset of fever, chills, and feeling unusually weak and tired. A rash may be present, often on the hands and feet. Anyone who has these symptoms should contact their health care provider right away.

How are these illnesses treated?

Antibiotics are used to treat people with both meningococcal meningitis and meningococcemia. People who have had close contact with the sick person any time during the two weeks before she/he became ill may also need to take antibiotics. Preventive treatment of all close contacts should be started up to two weeks after onset of the first case but preferably as soon as possible within the first 24 hours.

Why do close contacts of a sick person need to be treated?

Close contacts of a person who has meningococcal disease are treated with antibiotics because the bacteria may be spread from the infected person to other people through contact with the saliva (spit) of the infected person. The antibiotics will kill the bacteria and prevent illness.

Is there a vaccine to protect me from getting sick?

- Meningococcal vaccine can prevent 4 kinds of meningococcal disease. Routine childhood vaccination with meningococcal vaccine is not currently recommended, and the vaccine now available does not work in children under 2 years of age.
- Even though it cannot prevent all kinds of meningococcal disease, meningococcal vaccine is usually recommended for people in the military and people who will be traveling to parts of the world where the disease is very common.
- All college students and their parents should talk to their healthcare providers about meningococcal disease and meningococcal vaccine. The Massachusetts Department of Public Health encourages vaccination against meningococcal disease for college freshmen, especially those who will be living in dormitories or other group settings.
- Some children and adults with damaged or removed spleens or an immune disorder called “terminal complement deficiency” should receive meningococcal vaccine.
- Meningococcal vaccine may also be given during an outbreak situation, which is rare in the United States.

What should I do if I have had contact with a person who has meningococcal illness?

If you have had close contact with a person who has been diagnosed with meningococcal illness you should call your health care provider and get an antibiotic. If you have had contact with an ill person, but have not had close contact, you should be aware of the symptoms of illness and contact your doctor right away if you have any of these symptoms.

Are there times when I would not have to take antibiotics after close contact with a sick person?

Yes. Meningitis can be caused by many different types of germs, including other bacteria and viruses. Only certain types of meningitis require treatment of the infected person’s close contacts. If you have questions about meningitis or your exposure to a sick person, contact your doctor.

Where can I get more information?

- Your doctor, nurse or health clinic
- The Massachusetts Department of Public Health, Division of Epidemiology and Immunization at (617) 983-6800 or toll free at (888) 658-2850 or on the MDPH website at <http://www.mass.gov/dph>
- Your local health department (listed in the phone book under government)